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## (54) MANUFACTURE OF OPTICAL DEVICE

## (57) Abstract:

PURPOSE: To prevent generation of bubbles in silicone resin even if resin is thermally set for several minutes on a heating plate or in a cure furnace by using conductive adhesive which does not contain volatile solvent and by thermally setting it in two or more operations of low temperature thermosetting and high temperature thermosetting.

CONSTITUTION: An optical element 1 is die-bonded on a lead frame 2 with conductive adhesive 3, the conductive adhesive 3 is thermally set, a periphery of the optical element 1 is sealed with protecting resin 7 and the protecting resin 7 is thermally set. In such a manufacturing method of an optical device, conductive adhesive 3 which does not contain volatile solvent is used and the conductive adhesive 3 is thermally set in two or more operations of low temperature thermosetting and high temperature thermosetting. For example, after the conductive adhesive 3 is heated to 140 to 150°C for 1 to 2 minutes, it is further heated to 200 to 210°C for 1 to 2 minutes and set. Then, after non-solvent silicone resin as the protecting resin 7 is heated to 70 to 80°C for 1 to 2 minutes, it is further heated to 200 to 250°C for 5

to 10 minutes and set.

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